



# State of Vermont

*file*

Department of Fish and Wildlife  
Department of Forests, Parks and Recreation  
Department of Environmental Conservation  
State Geologist  
RELAY SERVICE FOR THE HEARING IMPAIRED  
1-800-253-0191 TDD>Voice  
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES  
Department of Environmental Conservation  
Wastewater Management Division  
103 South Main Street - Sewing Bldg.  
Waterbury, Vermont 05671-0405  
Telephone: (802) 241-3822  
Fax: (802) 241-2596  
[www.anr.state.vt.us/dec/ww/wwmd.cfm](http://www.anr.state.vt.us/dec/ww/wwmd.cfm)

March 18, 2004

Charles Safford  
Village of Essex Junction  
2 Lincoln Street  
Essex Jct., VT 05452

Richard McGuire  
Town of Williston  
722 Williston Road  
Williston, VT 05495

Patrick Scheidel  
Town of Essex  
81 Main Street  
Essex, VT 05452

**SUBJECT: CORRECTED PAGES**  
**Discharge Permit No. 3-1254**  
**Essex Junction Wastewater Treatment Facility**

Dear Mr Safford, Mr. McGuire, and Mr. Scheidel,

On March 16, 2004 this office renewed the Essex Junction Wastewater Treatment Facility's discharge permit 3-1254. Enclosed you will find corrected pages 2 and 3. These pages have been changed to remove the word DRAFT from the top of the page. Please replace the pages you have on file with the ones we have enclosed.

Our apologies for any inconvenience these corrected pages may have caused. If you have any questions, please contact Randy Bean at 802-241-3825.

Sincerely,

Carole Fowler  
Administration & Compliance Section

Enclosures: Corrected Pages 2 and 3 of discharge permit 3-1254 renewed on March 16, 2004.

cc: James Jutras, Essex WWTF



## State of Vermont

Department of Fish and Wildlife  
Department of Forests, Parks and Recreation  
Department of Environmental Conservation  
State Geologist  
RELAY SERVICE FOR THE HEARING IMPAIRED  
1-800-253-0191 TDD>Voice  
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES  
Department of Environmental Conservation  
Wastewater Management Division  
103 South Main St. - Sewing Bldg.  
Waterbury VT 05671-0405  
Telephone: (802) 241-3822  
FAX: (802) 241-2596

March 16, 2004

Charles Safford  
Village of Essex Junction  
2 Lincoln Street  
Essex Jct., VT 05452

Richard McGuire  
Town of Williston  
722 Williston Road  
Williston, VT 05495

Patrick Scheidel  
Town of Essex  
81 Main Street  
Essex, VT 05452

**Re: Discharge Permit No. 3-1254 – Essex Junction Wastewater Treatment Facility**

Dear Mr Safford, Mr. McGuire, and Mr. Scheidel,

Enclosed is your copy of Discharge Permit No. 3-1254 which has been signed on behalf of the Commissioner of the Department of Environmental Conservation.

This permit authorizes the discharge of treated and disinfected wastewater from the Village of Essex Junction Wastewater Treatment Facility to the Winooski River.

Please review the permit carefully and make special note of the effluent limitations, monitoring requirements and special conditions. As discussed in the cover letter for the draft permit, several changes have been incorporated in this permit. Specifically:

- 1 The effluent phosphorus limitations and reporting requirements have been modified to reflect the Lake Champlain Phosphorus TMDL.
- 2 Whole effluent and chemical toxicity testing has been incorporated to comply with federal regulations.
3. A quarterly monitoring requirements for copper and zinc has been included in the permit to enable the Agency to gather data on discharge of these pollutants to the lower Winooski River.

Other than your request regarding the clarification of TKN sampling on Page 3, we did not receive any comments during the public comment period. Therefore, the final permit is unchanged from the draft that was placed on public notice

Please note that this permit does not become effective until July 1, 2004 and if you have any questions regarding this permit, please contact Randy Bean at our office.

Sincerely,

A handwritten signature in cursive script, appearing to read "Brian D. Kooiker".

Brian D. Kooiker, Chief  
Direct Discharge and O&M Section

enclosures

cc.

James Jutras, Essex WWTF

AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WASTEWATER MANAGEMENT DIVISION  
103 SOUTH MAIN STREET  
WATERBURY, VERMONT 05671-0405

Permit No.: 3-1254  
File No.: 04-06  
PIN: EJ93-0004  
NPDES No.: VT0100111

Name of Permittee: Village of Essex Junction  
2 Lincoln Street  
Essex Junction, VT 05452

Co-permittee: Town of Essex  
81 Main Street  
Essex, VT 05452

Co-permittee: Town of Williston  
722 Williston Road  
Williston, VT 05495

Expiration Date: June 30, 2009

DISCHARGE PERMIT

In compliance with the provisions of the Vermont Water Pollution Control Act as amended (hereinafter referred to as the "Act") and the Federal Clean Water Act, as amended (33 U.S.C. §1251 et seq), the Village of Essex Junction, Vermont (hereinafter referred to as the "permittee") is authorized by the Secretary, Agency of Natural Resources, Waterbury, Vermont, to discharge from the Village of Essex Junction Wastewater Treatment Facility to the Winooski in accordance with the following general and special conditions. The Town of Essex and the Town of Williston (hereinafter referred to as the "Co-permittees") shall operate and maintain their pump stations and collection systems in accordance with the following applicable general and special conditions.

This permit shall become effective on July 1, 2004 and shall expire on June 30, 2009.

Jeffrey Wennberg, Commissioner  
Department of Environmental Conservation

By: Christine Thompson  
Christine Thompson, Director  
Wastewater Management Division

Date: March 16, 2004

**I. SPECIAL CONDITIONS****A. EFFLUENT LIMITS**

1. Beginning on July 1, 2004 until June 30, 2009 or until completion of the Village of Essex Junction Wastewater Treatment Facility upgrade (i.e. sludge thickening upgrade), the permittee is authorized to discharge from S/N 001 - outfall, the Village of Essex Wastewater Treatment Facility, to the Winooski, an effluent whose characteristics shall not exceed the values listed below:

<b>DISCHARGE LIMITATIONS</b>								
<b>Effluent Characteristic</b>	<b>Annual Limitation</b>	<b>Monthly Average</b>	<b>Weekly Average</b>	<b>Maximum Day</b>	<b>Monthly Average</b>	<b>Weekly Average</b>	<b>Maximum Day</b>	<b>Instantaneous Maximum</b>
		(lbs / day)			(Concentration)			
Flow	3.1 mgd average							
Ultimate Oxygen Demand (a,b)				1820				
Biochemical Oxygen Demand, 5-day, 20° C (b,c)		688	1032		30 mg/l	45 mg/l	50 mg/l	
Total Suspended Solids (c)		688	1032		30 mg/l	45 mg/l	50 mg/l	
Total Phosphorus (d)	5663 total pounds				0.8 mg/l			
Total Kjeldhal Nitrogen		Monitor only (June 1 – October 31)			monitor only (June 1 – October 31)			
Settleable Solids								1.0 ml/l
Total Copper		monitor only			monitor only			
Total Zinc		monitor only			monitor only			
Total Residual Chlorine								0.1 mg/l
Escherichia coli Bacteria								77/100 ml
PH					Between 6.5 and 8.5 Standard Units			

- (a) The Ultimate Oxygen Demand (UOD) limit shall be in effect during the period of June 1 to October 31 each year. UOD shall be calculated using the following equation:  

$$\text{UOD lbs} = [(\text{BOD lbs} \times 1.43) + (\text{TKN lbs} \times 4.57)]$$
- (b) The quantity of BOD and TKN discharged shall be limited such that the discharge does not exceed the UOD maximum daily limitation or the BOD limitations, whichever are more stringent.
- (c) The permittee shall operate the facility to meet the concentration limitation or the pounds limitation whichever is more restrictive.
- (d) Total Annual Pounds of Phosphorus discharged shall be defined as the sum of all the Total Monthly Pounds of Phosphorus discharged for the calendar year.  
 Total Monthly Pounds of Phosphorus discharged shall be calculated as follows:  

$$(\text{Monthly Average Phosphorus Concentration}) \times (\text{Total Monthly Flow}) \times 8.34 \quad (\text{See Total Phosphorus monitoring report form WR43-PO4.})$$

**A. EFFLUENT LIMITS**

2. Upon completion of the Village of Essex Junction Wastewater Treatment Facility upgrade (i.e. sludge thickening upgrade) until June 30, 2009, the permittee is authorized to discharge from S/N 001 - outfall, the Village of Essex Wastewater Treatment Facility, to the Winooski, an effluent whose characteristics shall not exceed the values listed below:

DISCHARGE LIMITATIONS								
Effluent Characteristic	Annual Limitation	Monthly Average	Weekly Average	Maximum Day	Monthly Average	Weekly Average	Maximum Day	Instantaneous Maximum
		(lbs / day)			(Concentration)			
Flow	3.3 mgd average							
Ultimate Oxygen Demand (a,b)				1820				
Biochemical Oxygen Demand, 5-day, 20° C (b,c)		688	1032		30 mg/l	45 mg/l	50 mg/l	
Total Suspended Solids (c)		688	1032		30 mg/l	45 mg/l	50 mg/l	
Total Phosphorus (d)	5663 total pounds				0.8 mg/l			
Total Kjeldhal Nitrogen		monitor only (June 1 – October 31)			monitor only (June 1 – October 31)			
Settleable Solids								1.0 ml/l
Total Copper		monitor only			monitor only			
Total Zinc		monitor only			monitor only			
Total Residual Chlorine								0.1 mg/l
Escherichia coli Bacteria								77/100 ml
pH					Between 6.5 and 8.5 Standard Units			

- (a) The Ultimate Oxygen Demand (UOD) limit shall be in effect during the period of June 1 to October 31 each year. UOD shall be calculated using the following equation:  

$$\text{UOD lbs} = [(\text{BOD lbs} \times 1.43) + (\text{TKN lbs} \times 4.57)]$$
- (b) The quantity of BOD and TKN discharged shall be limited such that the discharge does not exceed the UOD maximum daily limitation or the BOD limitations, whichever are more stringent.
- (c) The permittee shall operate the facility to meet concentration limitation or the pounds limitation whichever is more restrictive.
- (d) Total Annual Pounds of Phosphorus discharged shall be defined as the sum of all the Total Monthly Pounds of Phosphorus discharged for the calendar year.  
 Total Monthly Pounds of Phosphorus discharged shall be calculated as follows:  
 (Monthly Average Phosphorus Concentration) x (Total Monthly Flow) x 8.34 (See Total Phosphorus monitoring report form WR43-PO4.)

3. The Town of Essex shall be solely responsible for the proper operation and maintenance of that Town's pump stations and collection system, and for the enforcement of that Town's sewer use ordinance. The Town of Williston shall be solely responsible for the proper operation and maintenance of that Town's pump stations and collection system, and for the enforcement of that Town's sewer use ordinance. The Permittee (Village of Essex Junction) shall be solely responsible for the proper operation and maintenance of the Permittee's pump stations and collection system, the enforcement of Permittee's sewer use ordinance, and the proper operation and maintenance of the Village of Essex Junction Wastewater Treatment Facility.
4. The Village of Essex Junction Wastewater Treatment Facility upgrade shall be considered complete when the Permittee notifies the Department, by means of a Professional Engineer's certification, that the upgraded facility is operational and the Department issues a written acknowledgement of its operational status.
5. The effluent shall not have concentrations or combinations of contaminants including oil, grease, scum, foam, or floating solids which would cause a violation of the water quality standards of the receiving waters.
6. The discharge shall not cause or contribute to a violation of the Vermont Water Quality Standards or cause visible discoloration in the receiving water.
7. The monthly average concentrations of BOD5 and total suspended solids in the discharge shall not exceed 15 percent of the monthly average concentrations of BOD5 and total suspended solids in the influent into the permittee's wastewater treatment facilities. For the purposes of determining whether the permittee is in compliance with this condition, samples from the discharge and the influent shall be taken with appropriate allowance for detention times. See Part I, Special Conditions, Paragraph F.2., Effluent Monitoring.
8. When the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the permitted flow limitation, the permittee shall submit to the permitting authority projected loadings and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.
9. Any action on the part of the Agency of Natural Resources in reviewing, commenting upon or approving plans and specifications for the construction of wastewater treatment facilities shall not relieve the permittee from the responsibility to achieve effluent limitations set forth in this permit and shall not constitute a waiver of, or act of estoppel against any remedy available to the Agency, the State of Vermont or the federal government for failure to meet any requirement set forth in this permit or imposed by state or federal law.

## **B. WASTE MANAGEMENT ZONE**

In accordance with 10 V.S.A. Section 1252, this permit hereby establishes a waste management zone that extends from the outfall of the Village of Essex Junction Wastewater Treatment Facility in the Winooski River downstream 1.0 mile.

### C. REAPPLICATION

If the Permittee and Co-permittees desire to continue to discharge after the expiration of this permit, the Permittee and Co-permittees shall reapply on the application forms then in use at least 180 days before this permit expires.

Reapply for a Discharge Permit by: December 31, 2008

### D. OPERATING FEES

This discharge is subject to operating fees. The Permittee shall submit the operating fees in accordance with the procedures provided by the Secretary.

### E. TOXICITY TESTING

1. The Permittee shall conduct and submit the results of a single species (Pimephales promelas) or (Ceriodaphnia dubia), 48 hour acute Whole Effluent Toxicity (WET) test to the Agency as specified below.
  - a. In August or September 2005, the Permittee shall conducted a single species (Pimephales promelas) acute WET test on S/N 001 and the results shall be submitted to the Agency by November 15, 2005.
  - b. In January or February 2006, the Permittee shall conducted a single species (Ceriodaphnia dubia) acute WET test on S/N 001 and the results shall be submitted to the Agency by April 15, 2006.
  - c. In August or September 2007, the Permittee shall conducted a single species (Ceriodaphnia dubia) acute WET test on S/N 001 and the results shall be submitted to the Agency by November 15, 2007.
  - d. In January or February 2008, the Permittee shall conducted a single species (Pimephales promelas) acute WET test on S/N 001 and the results shall be submitted to the Agency by April 15, 2008.
  - e. Based upon the results of these tests or any other toxicity tests conducted on this discharge, this permit may be amended to require additional Whole Effluent Toxicity testing or a Toxicity Reduction Evaluation be conducted.
  - f. The whole effluent toxicity tests shall be conducted according to the procedures and guidelines specified in: Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (most recent edition) USEPA document.
2. **By December 31, 2005, December 31, 2006 and December 31, 2007**, the Permittee shall conduct and submit the results of an effluent analysis of S/N 001 for the pollutants included in Appendix J, Table 2 of 40 CFR Part 122 (see Attachment ) and submit the results to the Agency.



**F. MONITORING AND REPORTING****1. Sampling and Analysis**

The sampling, preservation, handling, and analytical methods used shall conform to regulations published pursuant to Section 304(g) of the Clean Water Act, under which such procedures may be required. Guidelines establishing these test procedures have been published in the Code of Federal Regulations, Title 40, Part 136 (Federal Register, Vol. 56, No. 195, July 1, 1999 or as amended).

If applicable, *Escherichia coli* shall be tested using test method 9213 D. found in Standard Methods for the Examination of Water and Wastewater, 18th or subsequent edition(s).

Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. The Permittee shall identify the effluent sampling location used for each discharge.

**2. Effluent Monitoring**

The Permittee shall monitor and record the quality and quantity of discharge(s) S/N 001 - outfall, the Village of Essex Wastewater Treatment Facility, according to the following schedule and other provisions:

Beginning on July 1, 2004 until June 30, 2009

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	Continuous	Daily Total, Max., Min.
UOD	1 x weekly <sup>(1)</sup>	calculated
BOD <sub>5</sub>	1 x weekly	8 hour composite <sup>(2)</sup>
TSS	1 x weekly	8 hour composite <sup>(2)</sup>
Total Phosphorus	1 x weekly	8 hour composite <sup>(2)</sup>
Total Kjeldahl Nitrogen	1 x weekly <sup>(1)</sup>	8 hour composite <sup>(2)</sup>
Settleable Solids	1 x daily	Grab <sup>(3)</sup>
<i>Escherichia coli</i> Bacteria	1 x weekly	Grab <sup>(4)</sup>
Total Copper	1 x quarterly	8 hour composite <sup>(2,5)</sup>
Total Zinc	1 x quarterly	8 hour composite <sup>(2,5)</sup>
Total Residual Chlorine	1 x daily	Grab <sup>(4)</sup>
PH	1 x daily	Grab

- (1) UOD and TKN sampling is only required between June 1 and October 31.
- (2) Composite samples shall be taken during the hours 6:00 a.m. to 6:00 p.m., unless otherwise specified. Eight hours is the minimum period for the composite.
- (3) Settleable Solids samples shall be collected between 10:00 a.m. and 2:00 p.m. or during the period of peak flow.
- (4) On the day that the Escherichia coli grab sample is collected, the daily total residual chlorine grab sample for that day shall be collected at the same time and location as the E. coli sample and a total residual chlorine sample prior to dechlorination shall be also be collected. Samples shall be collected between the hours of 6:00 a.m. to 6:00 p.m.
- (5) Samples for Total Copper and Total Zinc shall be taken during the months of September, December, March, and June.

### 3. Influent Monitoring

The Permittee shall monitor the quality of the **influent** according to the following schedule and other provisions.

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Influent BOD5	1 x monthly	8 - hour composite, minimum <sup>(1)</sup>
Influent TSS	1 x monthly	8 - hour composite, minimum <sup>(1)</sup>
Septage	Daily	Total volume received

- (1) Composite samples for BOD5 and TSS shall be taken during the hours of 6:00 a.m. to 6:00 p.m., unless otherwise specified. Eight hours is the minimum period for the composite.

### 4. Reporting

The Permittee shall submit monthly reports of monitoring results on form WR-43. Reports shall be submitted by the 15th day of each month, beginning with the month following the effective date of this permit.

If, in any reporting period, there has been no discharge, the Permittee shall submit that information by the report due date.

Signed copies of these, and all other reports required herein, shall be submitted to the Secretary at the following address:

Agency of Natural Resources  
Department of Environmental Conservation  
Wastewater Management Division  
103 South Main Street  
Waterbury, Vermont 05671-0405

All reports shall be signed:

- a. In the case of corporations, by a principal executive officer of at least the level of vice president, or his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the permit form originates;
- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor;
- d. In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

In addition to the monitoring and reporting requirements given above, daily monitoring of certain parameters for operational control are required by the Agency. Operations reports (reporting form WR-43) shall be submitted monthly.

## **5. Recording of Results**

The Permittee and Co-permittees shall maintain records of all information resulting from any monitoring activities required, including:

- a. The exact place, date, and time of sampling;
- b. The dates and times the analyses were performed;
- c. The person(s) who performed the analyses;
- d. The analytical techniques and methods used including sample collection handling and preservation techniques;
- e. The results of all required analyses.
- f. The records of monitoring activities and results, including all instrumentation and calibration and maintenance records;
- g. The original calculation and data bench sheets of the operator who performed analysis of the influent or effluent pursuant to requirements of Section I.(A) of this permit.

The results of monitoring requirements shall be reported (in the units specified) on the Vermont reporting form WR-43 or other forms approved by the Secretary.

**6. Additional Monitoring**

If the Permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form WR-43. Such increased frequency shall also be indicated.

**F. DRY WEATHER FLOWS**

Dry weather flows of untreated municipal wastewater from any sanitary or combined sewers by the Permittee or Co-permittees are not authorized by this permit and are specifically prohibited by State and Federal laws and regulations.

**G. EMERGENCY ACTION - ELECTRIC POWER FAILURE**

The Permittee and Co-permittees shall indicate in writing to the Secretary **within 30 days after the effective date of this permit** that the discharge shall be handled in such a manner that, in the event the primary source of electric power to the waste treatment facilities (including pump stations) fails, any discharge into the receiving waters will attempt to comply with the conditions of this permit, but in no case shall the wastes receive less than primary treatment (or its equivalent) plus disinfection.

The Permittee and Co-permittees shall either provide an alternative source of power for the operation of its treatment facilities, or demonstrate that the treatment facility has the capacity to store the wastewater volume that would be generated over the duration of the longest power failure that would have affected the facility in the last five years, excluding catastrophic events.

The alternative power supply, whether from a generating unit located at the plant site or purchased from an independent source of electricity, must be separate from the existing power source used to operate the waste treatment facilities. If a separate unit located at the plant site is to be used, the Permittee and Co-permittees shall certify in writing to the Secretary when the unit is completed and prepared to generate power.

The determination of treatment system storage capacity shall be submitted to the Wastewater Management Division upon completion.

**H. SEWER ORDINANCE**

The Permittee and Co-permittees shall have in effect a sewer use ordinance acceptable to the Secretary which, at a minimum, shall

1. Prohibit the introduction by any discharger into the Permittee's or Co-permittee's sewerage system or treatment facilities of any pollutant which:
  - a. is a toxic pollutant in toxic amounts as defined in standards issued from time to time under Section 307(a) of the Clean Water Act;
  - b. creates a fire or explosion hazard in the Permittee's treatment works;

- c. causes corrosive structural damage to the Permittee's treatment works, including all wastes with a pH lower than 5.0;
  - d. contains solid or viscous substances in amounts which would cause obstruction to the flow in sewers or other interference with proper operation of the Permittee's treatment works; or
  - e. in the case of a major contributing industry, as defined herein, contains an incompatible pollutant, as further defined herein, in an amount or concentration in excess of that allowed under standards or guidelines issued from time to time pursuant to Sections 304, 306, and/or 307 of the Clean Water Act.
2. Require 45 days prior notification to the Permittee or Co-permittee by any person or persons of a:
- a. proposed substantial change in volume or character of pollutants over that being discharged into the Permittee's treatment works at the time of issuance of this permit;
  - b. proposed new discharge into the Permittee's treatment works of pollutants from any source which would be a new source as defined in Section 306 of the Clean Water Act if such source were discharging pollutants; or
  - c. proposed new discharge into the Permittee's treatment works of pollutants from any source which would be subject to Section 301 of the Clean Water Act if it were discharging such pollutants.
3. Require any industry discharging into the Permittee's treatment works to perform such monitoring of its discharge as the Permittee or Co-permittees may reasonably require, including the installation, use, and maintenance of monitoring equipment methods, to keep records of the results of such monitoring, and to report the results of such monitoring to the permittee. Such records shall be made available by the Permittee and the Co-permittees to the Secretary upon request.
4. Authorize the Permittee's or Co-permittee's authorized representatives to enter into, upon, or through the premises of any industry discharging into the Permittee's treatment works to have access to and copy any records, to inspect any monitoring equipment or method required under subsection 3 above, and to sample any discharge into the permittee's treatment works.

The Permittee or Co-permittee shall notify the Secretary of any discharge specified in subsection 2 above within 30 days of the date on which the Permittee or Co-permittee is notified of such discharge. This permit may be modified accordingly.

## II. GENERAL CONDITIONS

### A. MANAGEMENT REQUIREMENTS

#### 1. Facility Modification / Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties as provided for in Section 1274 and 1275 of the Vermont Water Pollution Control Act. Any anticipated facility expansions or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new permit application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

In addition, the Permittee or Co-permittee shall provide notice to the Secretary of the following:

- a. any new introduction of pollutants into the treatment works from a source which would be a new source as defined in Section 306 of the Clean Water Act if such source were discharging pollutants;
- b. except for such categories and classes of point sources or discharges specified by the Secretary, any new introduction of pollutants into the treatment works from a source which would be subject to Section 301 of the Clean Water Act if such source were discharging pollutants; and
- c. any substantial change in volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into such works at the time of issuance of the permit.

The notice shall include:

- i. the quality and quantity of the discharge to be introduced into the system, and
- ii. the anticipated impact of such change in the quality or quantity of the effluent to be discharged from the permitted facility.

#### 2. Noncompliance Notification

In the event the Permittee or Co-permittees are unable to comply with any of the conditions of this permit due, among other reasons, to:

- a. breakdown or maintenance of waste treatment equipment (biological and physical-chemical systems including, but not limited to, all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units),
- b. accidents caused by human error or negligence, or
- c. other causes such as acts of nature,

the Permittee or Co-permittee shall notify the Secretary within 24 hours of becoming aware of such condition or by the next business day and shall provide the Secretary with the following information, in writing, within five (5) days:

- i. cause of non-compliance
- ii. a description of the non-complying discharge including its impact upon the receiving water;
- iii. anticipated time the condition of non-compliance is expected to continue or, if such condition has been corrected, the duration of the period of non-compliance;
- iv. steps taken by the Permittee or Co-permittee to reduce and eliminate the non-complying discharge; and
- v. steps to be taken by the Permittee or Co-permittee to prevent recurrence of the condition of non-compliance.

### **3. Operation and Maintenance**

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

- a. The Permittee and Co-permittees shall, at all times, maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the Permittee and Co-permittees to achieve compliance with the terms and conditions of this permit.
- b. The Permittee and Co-permittees shall provide an operating staff which is duly qualified and adequate in number to carry out the operation, maintenance, and testing functions required to insure compliance with the conditions of this permit.
- c. The operation and maintenance of this facility shall be performed only by qualified personnel. The personnel shall be certified as required under the Vermont Water Pollution Abatement Facility Operator Certification Regulations.

**4. Quality Control**

The Permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

The Permittee shall keep records of these activities and shall provide such records upon request of the Secretary.

The Permittee shall demonstrate the accuracy of the flow measurement device weekly and report the results on the monthly report forms. The acceptable limit of error is  $\pm 10\%$ .

The Permittee shall analyze any additional samples as may be required by the Agency of Natural Resources to ensure analytical quality control.

**5. Bypass**

The diversion or bypass of facilities (including pump stations) necessary to maintain compliance with the terms and conditions of this permit is prohibited, except where authorized under the terms and conditions of an Emergency Pollution Permit issued pursuant to 10 V.S.A. Section 1268.

**6. Duty to Mitigate**

The Permittee and Co-permittees shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State resulting from non-compliance with any condition specified in this permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

**7. Records Retention**

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, and shall be submitted to Department representatives upon request. This period shall be extended during the course of ongoing litigation regarding the discharge of pollutants or when requested by the Secretary.

**8. Solids Management**

Collected screenings, sludges, and other solids removed in the course of treatment and control of wastewaters shall be stored, treated and disposed of in accord with t 10 V.S.A., Chapter 159 and with the terms and conditions of any certification, interim or final, transitional operation authorization or order issued pursuant to 10 V.S.A., Chapter 159 that is in effect on the effective date of this permit or is issued during the term of this permit.

**9. Emergency Pollution Permits**



Maintenance activities, or emergencies resulting from equipment failure or malfunction, including power outages, which result in an effluent which exceeds the effluent limitations specified herein, shall be considered a violation of the conditions of this permit, unless the Permittee or Co-permittee immediately applies for, and obtains, an emergency pollution permit under the provisions of 10 V.S.A., Chapter 47, Section 1268. The Permittee or Co-permittee shall notify the Department of the emergency situation by the next working day.

10 V.S.A., Chapter 47, Section 1268 reads as follows:

"When a discharge permit holder finds that pollution abatement facilities require repairs, replacement or other corrective action in order for them to continue to meet standards specified in the permit, he may apply in the manner specified by the secretary for an emergency pollution permit for a term sufficient to effect repairs, replacements or other corrective action. The permit may be issued without prior public notice if the nature of the emergency will not provide sufficient time to give notice; provided that the secretary shall give public notice as soon as possible but in any event no later than five days after the effective date of the emergency pollution permit. No emergency pollution permit shall be issued unless the applicant certifies and the secretary finds that:

- (1) there is no present, reasonable alternative means of disposing of the waste other than by discharging it into the waters of the state during the limited period of time of the emergency;
- (2) the denial of an emergency pollution permit would work an extreme hardship upon the applicant;
- (3) the granting of an emergency pollution permit will result in some public benefit;
- (4) the discharge will not be unreasonably harmful to the quality of the receiving waters;
- (5) the cause or reason for the emergency is not due to wilful or intended acts or omissions of the applicant."

Application shall be made to the Secretary of the Agency of Natural Resources, Department of Environmental Conservation, 103 South Main Street, Waterbury, Vermont 05671-0405.

## **B. RESPONSIBILITIES**

### **1. Right of Entry**

The Permittee and Co-permittee shall allow the Secretary or authorized representative, upon the presentation of proper credentials:

- a. to enter upon the Permittee's or Co-permittee's premises in which an effluent source or any records required to be kept under terms and conditions of the permit are located;

- b. to have access to and copy any records required to be kept under the terms and conditions of the permit;
- c. to inspect any monitoring equipment or method required in the permit; or
- d. to sample any discharge of pollutants.

## **2. Transfer of Ownership or Control**

This permit is not transferable without prior written approval of the Secretary. All application and operating fees must be paid in full prior to transfer of this permit. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the Permittee or Co-permittee shall provide a copy of this permit to the succeeding owner or controller and shall send written notification of the change in ownership or control to the Secretary. The Permittee or Co-permittee shall also inform the prospective owner or operator of their responsibility to make an application for transfer of this permit. This application must include as a minimum; a written statement from the prospective owner or operator certifying:

- a. The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership.
- b. The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit.
- c. The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.
- d. The date of sale or transfer.

The Department may require additional information dependent upon the current status of the facility operation, maintenance, and permit compliance.

## **3. Confidentiality**

Pursuant to 10 V.S.A. 1259(b):

“Any records, reports or information obtained under this permit program shall be available to the public for inspection and copying. However, upon a showing satisfactory to the secretary that any records, reports or information or part thereof, other than effluent data, would, if made public, divulge methods or processes entitled to protection as trade secrets, the secretary shall treat and protect those records, reports or information as confidential. Any records, reports or information accorded confidential treatment will be disclosed to authorized representatives of the state and the United States when relevant to any proceedings under this chapter.”

**4. Permit Modification**

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

- a. violation of any terms or conditions of this permit;
- b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

**5. Toxic Effluent Standards**

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Federal Act for a toxic pollutant which is present in the Permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, then this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the Permittee so notified.

**6. Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the Permittee or Co-permittees from any responsibilities, liabilities, or penalties to which the Permittee or Co-permittees are or may be subject to under 10 V.S.A. §1281.

**7. Other Materials**

Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

- a. They are not:
  - i. designated as toxic or hazardous under provisions of Sections 307 and 311, respectively, of the Clean Water Act, or
  - ii. known to be hazardous or toxic by the Permittee or the Co-permittees, except that such materials indicated in (a) and (b) above may be discharged in certain limited amounts with the written approval of, and under special conditions established by, the Secretary or his designated representative, if the substances will not pose any imminent hazard to the public health or safety;
- b. The discharge of such materials will not violate applicable water quality standards; and

- c. The Permittee or Co-permittees are not notified by the Secretary to eliminate or reduce the quantity of such materials entering the watercourse.

**8. Navigable Waters**

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

**9. Civil and Criminal Liability**

Except as provided in, "Bypass" (Part II.A., paragraph 5.), "Emergency Action - Electric Power Failures" (Part I, paragraph G.), and "Emergency Pollution Permits" (Part II.A., paragraph 9.), nothing in this permit shall be construed to relieve the Permittee or Co-permittees from civil or criminal penalties for noncompliance. Civil penalties, as authorized under 10 V.S.A. §1274 and 10 V.S.A. §8010, shall not exceed \$10,000 a day for each day of violation. Criminal penalties, as authorized under 10 V.S.A. §1275, shall not exceed \$25,000 for each day of violation, imprisonment for up to six months, or both.

**10. State Laws**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee and the Co-permittees from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

**11. Property Rights**

Issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

**12. Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

**13. Authority**

This permit is issued under authority of 10 V.S.A. §1259 which states that: "No person shall discharge any waste, substance, or material into waters of the State, nor shall any person discharge any waste, substance, or material into an injection well or discharge into a publicly owned treatment works any waste which interferes with, passes through without treatment, or is otherwise incompatible with those works or would have a substantial adverse effect on those works or on water quality, without first obtaining a permit for that discharge from the Secretary", and under the authority of Section 402 of the Clean Water Act, as amended.

**14. Definitions**

For purposes of this permit, the following definitions shall apply.

**The Act** - The Vermont Water Pollution Control Act, 10 V.S.A. Chapter 47

**Annual Average** - The highest allowable average of daily discharges calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar year divided by the number of daily discharges measured during that year.

**Average** - The arithmetic means of values taken at the frequency required for each parameter over the specified period.

**The Clean Water Act** - The federal Clean Water Act, as amended.

**Composite Sample** - A sample consisting of a minimum of one grab sample per hour collected during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportionally to flow over that same time period.

**Daily Discharge** - The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

For pollutants with limitations expressed in pounds the daily discharge is calculated as the total pounds of pollutants discharged over the day.

For pollutants with limitations expressed in mg/l the daily discharge is calculated as the average measurement of the pollutant over the day.

**Grab Sample** - An individual sample collected in a period of less than 15 minutes.

**Incompatible Substance (Pollutant)** - Any waste being discharged into the treatment works which interferes with, passes through without treatment, or is otherwise incompatible with said works or would have a substantial adverse effect on these works or on water quality. This includes all pollutants required to be regulated under the Federal Clean Water Act.

**Instantaneous Maximum** - A value not to be exceeded in any grab sample.

**Major Contributing Industry** - One that: (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its wastes a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Clean Water Act; or (4) has a significant impact, either singly or in combination with other contributing industries, on a publicly owned treatment works or on the quality of effluent from that treatment works.

**Maximum Day** (maximum daily discharge limitation) - The highest allowable "daily discharge" (mg/l, lbs or gallons).

**Mean** - The mean value is the arithmetic mean.

**Monthly Average** - (Average monthly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs or gallons) over a calendar month, calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar month divided by the number of daily discharges measured during that month.

**NPDES** - The National Pollutant Discharge Elimination System.

**Secretary** - The Secretary of the Agency of Natural Resources

**State Certifying Agency**

Agency of Natural Resources  
Department of Environmental Conservation  
Wastewater Management Division  
103 South Main Street  
Waterbury, Vermont 05671-0405

**Weekly Average** - (Average weekly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs or gallons) over a calendar week, calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar week divided by the number of daily discharges measured during that week.

**NPDES Permit Testing Requirements for POTWs**  
**40 CFR §122.21 - Appendix J, Table 2**

Hardness (of receiving water, upstream of WWTF outfall)

*Metals (total recoverable), cyanide and total phenols:*

Antimony

Arsenic

Beryllium

Cadmium

Copper

Lead

Mercury

Nickel

Selenium

Silver

Thallium

Zinc

Cyanide

Total phenolic compounds

*Volatile organic compounds:*

acrolein

acrylonitrile

benzene

bromoform

carbon tetrachloride

chlorobenzene

chlorodibromomethane

chloroethane

2-chloroethylvinyl ether

chloroform

dichlorobromomethane

1,1-dichloroethane

1,2-dichloroethane

Trans-1,2-dichloroethylene

1,1-dichloroethylene

1,2-dichloropropane

1,3-dichloropropylene

ethylbenzene

methyl bromide

methyl chloride

methylene chloride

1,1,2,2-tetrachloroethane

tetrachloroethylene

toluene

1,1,1-trichloroethane

1,1,2-trichloroethane

trichloroethylene

vinyl chloride

*Acid-extractable compounds:*

p-chloro-m-cresol

2-chlorophenol

2,4-dichlorophenol

2,4-dimethylphenol

4,6-dinitro-o-cresol

2,4-dinitrophenol

2-nitrophenol

4-nitrophenol

pentachlorophenol

phenol

2,4,6-trichlorophenol

*Base-neutral compounds:*

acenaphthene

acenaphthylene

anthracene

benzidine

benzo(a)anthracene

benzo(a)pyrene

3,4-benzofluoranthene

benzo(ghi)perylene

benzo(k)fluoranthene

bis(2-chloroethoxy)methane

bis(2-chloroethyl)ether

bis(2-chloroisopropyl)ether

bis(2-ethylhexyl)phthalate

4-bromophenyl phenyl ether

butyl benzyl phthalate

2-chloronaphthalene

4-chlorophenyl phenyl ether

chrysene

di-n-butyl phthalate

di-n-octyl phthalate

dibenzo(a,h)anthracene

1,2-dichlorobenzene

1,3-dichlorobenzene

1,4-dichlorobenzene

3,3'-dichlorobenzidine

diethyl phthalate

dimethyl phthalate

2,4-dinitrotoluene

2,6-dinitrotoluene

1,2-diphenylhydrazine

fluoranthene

fluorene

hexachlorobenzene

hexachlorobutadiene

hexachlorocyclo-pentadiene

hexachloroethane

indeno(1,2,3-cd)pyrene

isophorone

naphthalene

nitrobenzene

N-nitrosodi-n-propylamine

N-nitrosodimethylamine

N-nitrosodiphenylamine

phenanthrene

pyrene

1,2,4-trichlorobenzene